EVERSTAR
Smart Wireless Technology

RF CCT Tuneable Driver

PRODUCT SPECIFICATION

Product description : 2.4G Wireless Air Self-inspection Sync CCT Constant Current dimming Driver

Version : 1.0

1. PRODUCT PHOTO



2. FEATURES

- Isolated driver
- Adopting advanced PWM technology
- Higher efficiency, high PF, non-flicker
- Short-circuit protection, overvoltage protection
- High-quality delicate & soft dimming effect（4096 level）
- Memory function
- 2.4GHz wireless remote control, Air Self-inspection Sync control
- Compatible with Freelighting APP control system, achieve WIFI intelligent control by your mobile phone.
- Designed for constant current CW+WW LED Light Fixtures: like LED panel, LED ceiling lamps, LED down light etc.
- Widely used for intelligent household/commercial indoor lighting, like mall, hotel, office indoor lighting design.
- Certificate: CE/EMC/RED/RoHS
- 3 years warranty White color

3. TECHNICAL PARAMETERS

Electrical performance tests based on condition of ambient temperature:25 ° C ± 10%, and 230VAC / 50HZ input			
Factor	**Index**	**38W**	**25W**
Input	Voltage range	90-264VAC	90-264VAC
	Frequency range	47-63Hz	47-63Hz
	Rated Current	0.23A（full load）	0.25A（full load）
	Surge current	＜50A	＜62A
	Standby power	≤1.3W	≤0.7W
	Efficiency	>85%(full load)	>83%(full load)
	Power factor（PF）	≥0.91	0.5
	Port	Three lines input（L/N/FG）	Three lines input（L/N/FG, FG as optional）
Output	No-Load Voltage	53V	23V（12-21V ），44V（24V-42V）
	Voltage range	18V-42VDC	12-21V or 24V-42VDC
	Led string	6-12 LEDs	4-6 LEDs or 8-12 LEDs
	Rated Current	650mA-900mA	300mA-1000mA /300mA-600mA
	Maximum power supply	38W（CW+WW）	25W（CW+WW）
	Current Accuracy	±5%	±5%
	PWM frequency	3KHz	1KHz
	Dimming level	1024	1024
	Dimming range	3-100%	3-100%
	Camera effect	non-flicker	non-flicker
	Port	Three lines output, common anode	Three lines output, common anode
Reliability	Power supply solution	isolated power supply	isolated power supply
	Ambient temperature Ta	-20～45℃	-20～45℃
	Case temperature Tc	85℃ (based on work environment temperature at 45℃, And Max power supply)	85℃ (based on work environment temperature at 45℃, And Max power supply)
	Storage temperature	-40～85℃ (relative humidity 20% - 90% non-condensing)	-40～85℃ (relative humidity 20% - 90% non-condensing)
	Life time	31000hours(based on work environment temperature 25℃±10%，230VAC input，Maximum power load，Case temperature 72℃)	50000 hours(based on work environment temperature 25℃±10%，230VAC input，Maximum power load，Case temperature 65℃)
	Warranty	3years	3years

Safety and EMC	CE - LVD	EN61347-1、EN61347-2-13	
	CE - EMC	EMI（EN55022、EN61000-3-3） EMS（EN55024、EN61000-4-2，3,4,5,6,11）	
	Withstand voltage	I/P-O-P:3.75KVAC (I/P-FG)1.5KVAC (O/P-FG) 1.5KVAC	
	Insulation resistance	≥100MΩ(based on environment temperature at25℃±10℃，relative humidity below 70%, applied voltage at 500VDC between: input and output, input and GND, output and GN, time is 60s.	
protection	Dustproof waterproof level	IP40	IP40
	Overvoltage protection	Yes（Maximum 53V)	Yes（Maximum 44V)
	Short-circuit protection	Yes (Into the intermittent mode when short circuit, short circuit relieve automatically restore the output)	Yes (Into the intermittent mode when short circuit, short circuit relieve automatically restore the output)
Others	Frequency of RF remote control	2.4GHz	2.4GHz
	Remote control distance	30m	30m
	Memory function	Yes	Yes
	G.W	165g	140g
	Product dimensions	L135*W45*H31mm	L115*W45*H31mm
	Packing dimensions	L140*W48*H35mm	L140*W48*H35mm
	Remark	the sum current of two channels for CCT driver don't exceed the maximum value of single channel current, that is, the maximum brightness is : 50%CW+50%WW.	

4. CASE TEMPERATURE TC AND DRIVER LIFE CURVE4

1）38W drivers

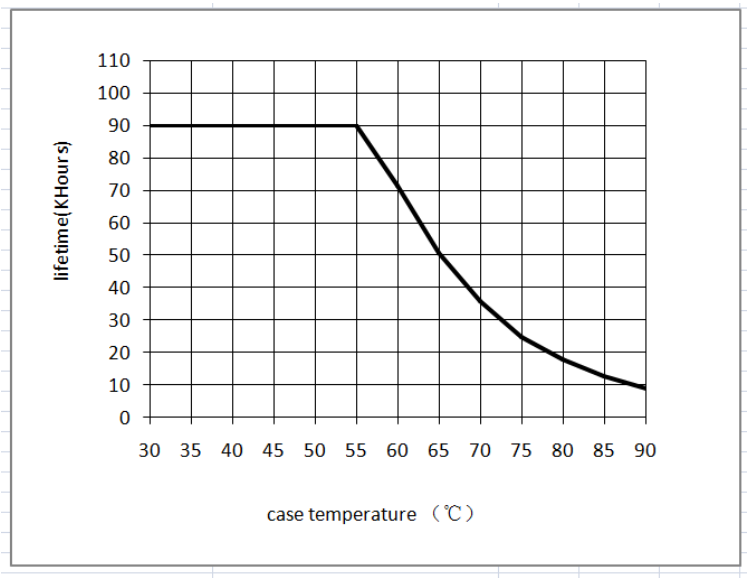


Figure 1 The life time for 38W drivers when Tc at 40℃，50℃，60℃，70℃，80℃，90℃

2）25Wdrivers

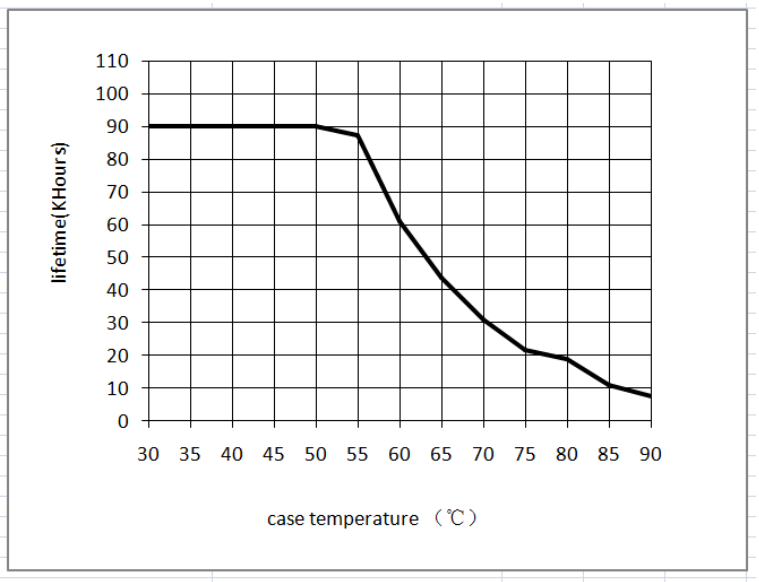


Figure 2　The life time for 25W drivers when Tc at 40℃，50℃，60℃，70℃，80℃，90℃

5. MAIN-PRODUCT CODE AND PARAMETERS

1）38W regular models and parameters

Models	Watt	Output current	Output voltage	Led string
ESWT-38-90CDH	38W	900mA	18-42V DC	6～12 LEDs
ESWT-36-85CDH	36W	850mA	18-42V DC	6～12 LEDs
ESWT-34-80CDH	34W	800mA	18-42V DC	6～12 LEDs
ESWT-32-75CDH	32W	750mA	18-42V DC	6～12 LEDs
ESWT-30-70CDH	30W	700mA	18-42V DC	6～12 LEDs
ESWT-27-65CDH	27W	650mA	18-42V DC	6～12 LEDs

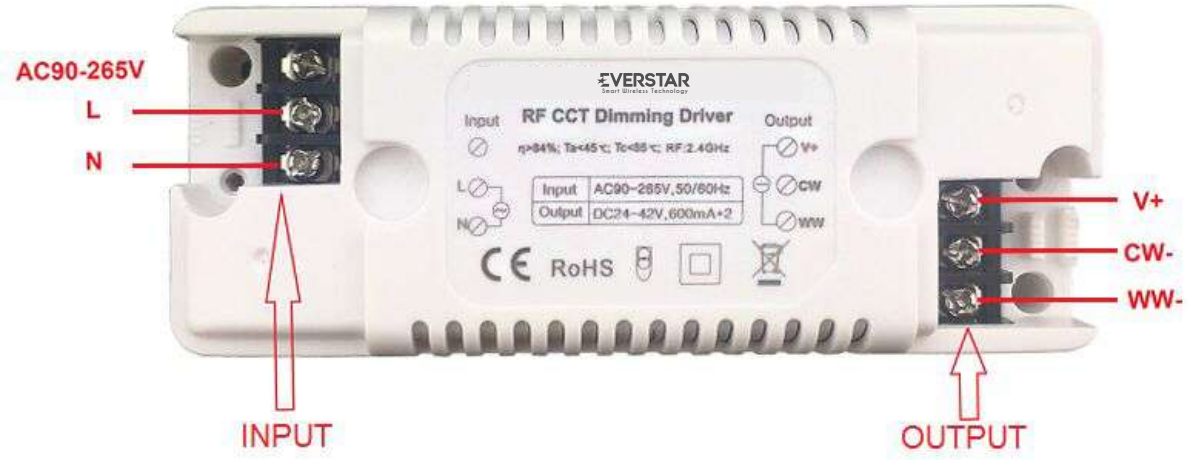
2）25W regular models and parameters

Models	Rated power	Rated current per channel	Voltage range	Led string
ESWT-25-60CDL	25W	600mA	24-42V DC	8～12 LEDs
ESWT-21-50CDL	21W	500mA	24-42V DC	8～12 LEDs
ESWT-19-45CDL	19W	450mA	24-42V DC	8～12 LEDs
ESWT-17-40CDL	17W	400mA	24-42V DC	8～12 LEDs
ESWT-15-35CDL	15W	350mA	24-42V DC	8～12 LEDs
ESWT-13-30CDL	13W	300mA	24-42V DC	8～12 LEDs
ESWT-21-100CDL	21W	1000mA	12-21V DC	4～6 LEDs
ESWT-19-90CDL	19W	900mA	12-21V DC	4～6 LEDs
ESWT-17-80CDL	17W	800mA	12-21V DC	4～6 LEDs
ESWT-15-70CDL	15W	700mA	12-21V DC	4～6 LEDs
ESWT-13-60CDL	13W	600mA	12-21V DC	4～6 LEDs

Remark：Please confirm with EVERSTAR for other parameters

6. INTERFACE SPECIFICATION

（Three lines output, common anode）



Wire specifications recommend：

Input wire：three-core PVC plastic wire H05VV-F ，diameter =0.72mm，VDE certificate，core 3*1.0mm2. 300/500V，Stripping 11mm and tin dipping 3mm for the end of wire which is directly connect with the driver.

Output wire：three-core PVC plastic wire，diameter =0.5mm. Stripping 11mm and tin dipping 3mm for the end of wire which is directly connect with the driver.

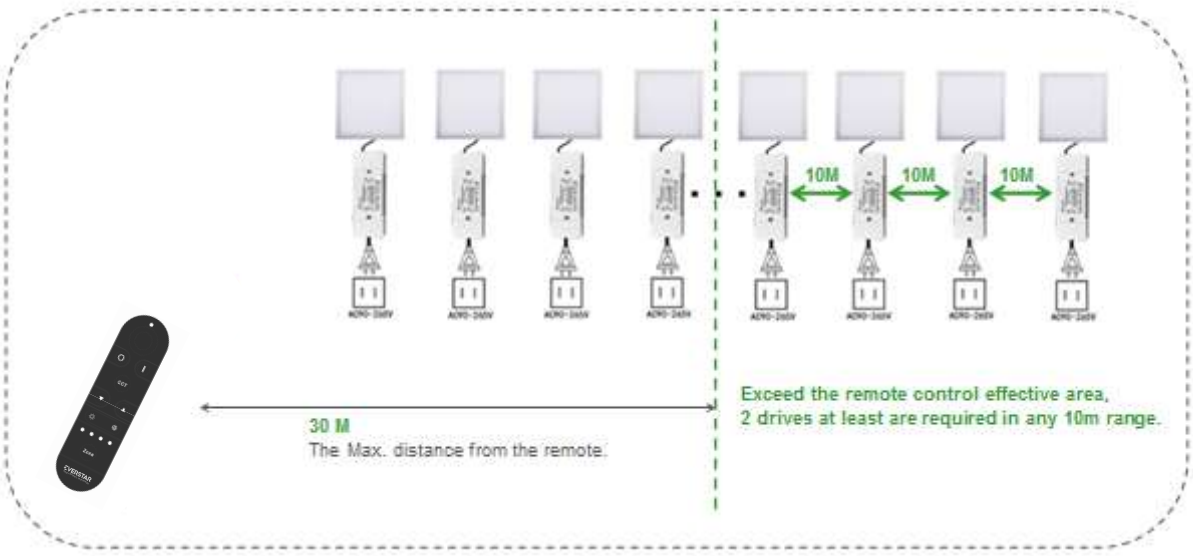
7. PRODUCT COMPATIBILITY（REMOTE CONTROL OPTIONAL）

Model：ES-CCT-2.4G (Multi-zone)	Model：ES-CCT-2.4G-4B (Multi-zone)
	
Model：WI FI (Coollight SYSTEM)	
	

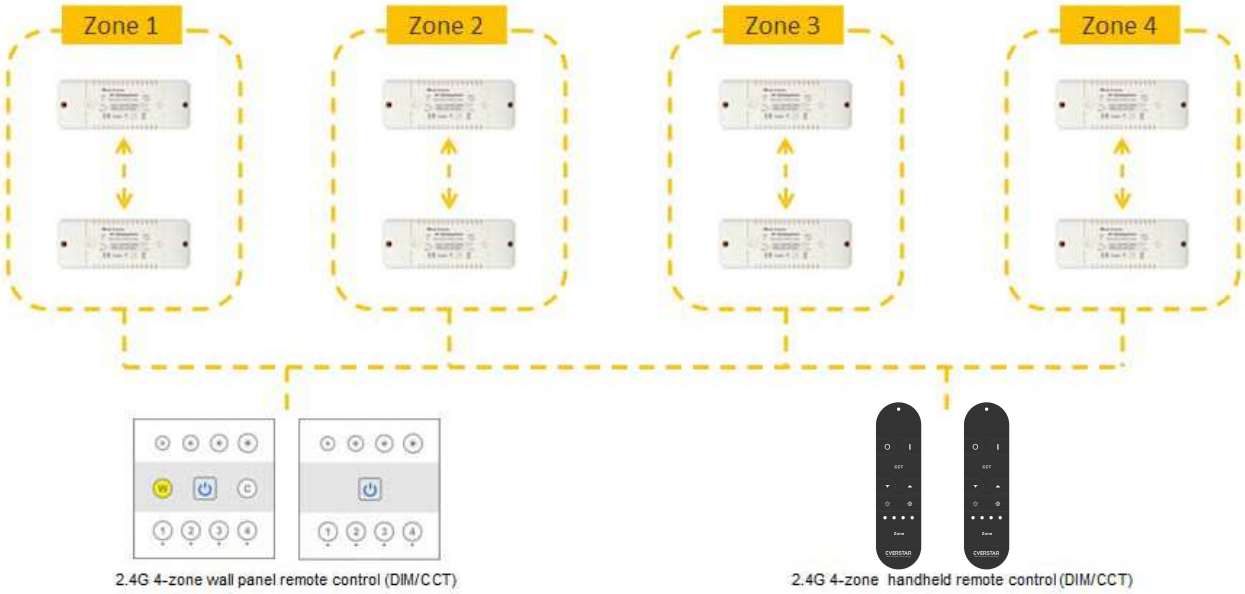
8. TYPICAL APPLICATIONS

1）Compatible with more kinds of remote control, Any combination is okay according to the project requirement.

2）Air Self-inspection Sync technology make it has more excellent wireless synchronization function rather than other similar products. Especially, more led drivers(No limited) can be wire-less-connected and sync controlled by one remote control, No longer be limited by remote control distance.



（3）Typical applications for 4 zones remote control, more drivers can be sync controlled in each zone, 4 zones can be controlled both separately and overall.



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9. TIPS:

1) If the lamp turned off by remote control, it also can restart the lamp directly by the AC power switch(No-flicker driver need to restart after turn off the power switch and discharge for 5s.
2) If the lamp is light up without any operation in 167 hours, the driver will turn off the lamp automatically. It
will recount the time if there is any operation from power switch or remote control.
3) Each driver can save unique RF codes(for remote control) and unique wifi code(for wifi control). You
can copy the RF code between remotes when more than one remote are needed. Please get the operation instruction from the remotes specification.
4) Memory function, each time power-on reserve the mode which stop in the last power-down.